

## Prevention of Hepatitis B Exposure in an Inpatient Dialysis Unit

**Reason for the project:** Combating hepatitis B virus (HBV) exposures is a long-standing issue in the practice of hemodialysis. This quality improvement project focuses on efforts to reduce the chances of patient to patient HBV exposure in an inpatient hemodialysis unit.

**Problem:** The impetus for this project is two near miss events within a three month period. These events highlighted gaps in the ability for this unit to reliably identify HBV positive patients in a timely manner sometime before the end of a patient's treatment which is necessary for proper cleaning, dedicating, sequestering, and isolating equipment, rooms, employees and patients to ensure others are not exposed to this virus.

**Methods:** A survey was utilized to help identify the largest gaps in the process. An interdisciplinary team was put together to discuss viable and effective options for closing the gaps. The largest gap identified was the inability for RNs to receive notification of positive HBV results or to remember to check these results before beginning the next treatment. A combination of visual aids, timers, and automated phone calls or text pages was designed to add a layer of automated notification to the dialysis RNs caring for each patient. By embedding a layer of automation for the notification of each positive test result the nurses are better equipped to take proper action and eliminate the possibility for HBV exposure. This project was approved by the hospital IRB and was approved through the expedited review process at JMU.

**Results:** A retroactive review of the data will occur after the projects interventions have been implemented. This review period will be the month of March 2019. Effectiveness will be measured by tracking near misses as well as actual exposures with the goal of both being zero.